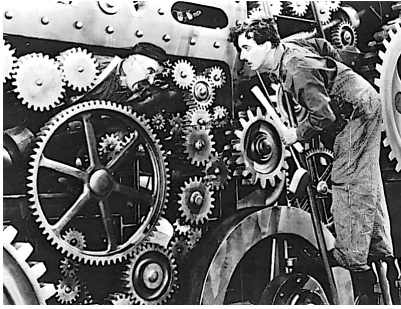


## RIJ and ChatGPT Discuss 'Funding Short'

By Kerry Pechter      Wed, May 28, 2025

*Life insurers used to be known as champions of 'asset-liability matching,' or ALM. Today, many of them are doing the opposite by 'funding short.' Here's a transcript of RIJ's recent conversation with ChatGPT about the risks and rewards of funding short, and its role in today's annuity business.*



For humans, the Bermuda Triangle strategy is difficult to understand. It is many layers deep and crosses several regulatory jurisdictions. But ChatGPT, the widely-used artificial intelligence app, knows a lot about the BT strategy. That includes the role of annuity reserves in financing private assets.

Last month, ChatGPT and *RIJ* “talked” about the flow of annuity reserves into collateralized loan obligations (CLOs). The topic naturally brought us to “shadow banking.” Institutions like life insurers can go to shadow banks (e.g., money market mutual funds, the Federal Home Loan Bank) to borrow large amounts at low rates for less than one year.

This process is known as “funding short.” It is essential for the “carry trade” of borrowing short and investing long. Certain annuity-issuing life insurers are now in the shadow banking and carry trade businesses—increasingly so. It has helped them recover from the long low-interest period.

Life insurers already “borrow” a lot by selling annuities. Additional loans from shadow banks—in the tens of billions, in some cases—enable them to finance a tower of leveraged assets. Annuity reserves provide collateral; they are the bedrock of the tower.

As we know from past credit crises, the carry trade is a safe, profitable business until something throws a wrench in the gearing and the carry-trade performers suddenly can’t roll over their short-term loans.

Here's a transcript of a recent "conversation" between RIJ and ChatGPT on this topic.

**RIJ:** ChatGPT, please define "funding short," as in "shadow banking."

**ChatGPT:** In the context of shadow banking, the term funding short" refers to the practice of using short-term borrowing to finance longer-term, often illiquid assets.

Breakdown:

- "Short" refers to the short duration (often overnight to a few months) of the liabilities used to obtain funding—such as repurchase agreements for (repos), commercial paper, or other forms of short-term wholesale funding.
- The risk arises when these short-term borrowings mature before the long-term assets (like loans, securities, or structured products) generate cash or can be sold.

**Why It Matters in Shadow Banking:**

Shadow banking entities—such as money market funds, structured investment vehicles (SIVs), or securitization conduits—often lack access to central bank liquidity or deposit insurance. They rely heavily on short-term funding markets to operate.

This creates a maturity mismatch, which can be dangerous:

- If lenders refuse to roll over short-term funding (a "run"), the shadow bank might be forced to sell long-term assets at fire-sale prices.
- This is what happened during the 2007-2008 financial crisis—entities like Lehman and Bear Stearns were funding long-term, illiquid positions with overnight borrowing.

Example: A structured investment vehicle holds mortgage-backed securities with a 10-year maturity, but funds itself by issuing 90-day commercial paper. It's "funding short." If

investors stop buying its paper, the SIV can't meet its obligations—even though its assets are technically valuable long-term.

In short: "Funding short" = borrowing with short maturities to invest in longer-term assets, creating liquidity and rollover risk—especially outside traditional banking.

**RIJ:** So it's in the opposite spirit of asset liability matching?

**ChatGPT:** Exactly — "funding short" is the opposite of proper asset-liability matching.

Asset-Liability Matching (ALM) in principle:

- Seeks to match the maturity and cash flow timing of assets and liabilities.
- Goal: ensure that liabilities can be paid as they come due without needing to sell assets
- prematurely.

"Funding short" breaks this rule:

- You borrow short (liabilities mature quickly)
- And you lend or invest long (assets are illiquid or mature far later).
- This creates a maturity mismatch and exposes the institution to rollover risk — the danger that it won't be able to refinance its short-term debt.

### **Why Some Shadow Banks Still Do It**

Short-term funding is usually cheaper, so it boosts returns (until it doesn't).

When markets are calm, rollover seems easy — until a liquidity shock hits.

So yes — "funding short" is fundamentally at odds with sound ALM, and is a key vulnerability in shadow banking systems.

**RIJ:** I'm curious because asset managers who own life insurers (once model practitioners of ALM) now are financing positions with all kinds of money... Federal Home Loan Bank

(FHLB) money, short-term money, as well as annuity reserves. I have difficulty distinguishing between a position and collateral in these daisy chains of assets and liabilities.

**ChatGPT:** You're asking the right question — the distinction between "position" and "collateral" gets very blurry in modern asset-liability structures, especially in life insurers owned by asset managers or private equity firms. Let's unpack what's going on, step by step:

### **1. Traditional Life Insurers: Disciplined ALM**

Historically, life insurers matched long-dated liabilities (annuities, life policies) with high-grade, long-duration assets, managing credit, interest rate, and liquidity risk carefully. The focus was on predictable spread income over decades.

### **2. Asset Manager-Owned Insurers: Turning Insurance into a Funding Vehicle**

Now, private equity firms and asset managers (e.g., Apollo, Blackstone, KKR) acquire life insurers not just for underwriting income — but to access their stable, long-term liabilities (like annuity premiums) as a source of capital to fund investment strategies.

So instead of ALM discipline, the game is more like:

- Use annuity reserves (a liability on the balance sheet) as "patient capital"
- Leverage that to invest in yield-enhancing strategies: CLO tranches, private credit, infrastructure debt, etc.
- Supplement with short-term or cheap funding (e.g. FHLB advances, repo, asset-backed commercial paper) to increase returns.

### **3. The Daisy Chain: When Assets Become Collateral, Which Funds More Assets**

Here's where things blur:

- A CLO equity position is an investment — but it might also be pledged as collateral to borrow more.
- FHLB advances require eligible collateral — often agency MBS or investment-grade assets, which themselves may be financed.
- Structured notes may be backed by repackaged annuity flows or other opaque asset streams.

At each level:

- The asset supports a liability (collateral)
- That liability funds a new asset (investment)
- And so on — creating interlinked chains of contingent claims.

It's a shadow bank inside an insurer's skin, and each asset can be:

- A position on the investment book
- A collateral source for funding

Or both — depending on the structure and point in the chain.

#### **4. Why It Matters:**

This blurring leads to:

- Opacity: Hard to see through to the real liquidity profile.
- Fragility: If one part of the chain seizes (e.g., repo funding dries up), the whole stack can wobble.
- Contagion: Because annuity holders are long-term, but some of the underlying liquidity risk is short-term.

#### **Summary**

You're right to sense confusion — it's not you. These structures intentionally obscure where the true leverage and liquidity risks lie. What used to be clear (assets = cash flow generators; liabilities = cash flow promises) is now recycled, layered, and abstracted.

What you're observing is the tension between insurance as a stable liability platform and asset management as a return-maximizing business. The new model bends insurance balance sheets toward shadow banking — with all its complexity and risk.

If you want to dig deeper, we can walk through a simplified daisy chain example to trace one of these loops.

**RIJ:** Sure.

**ChatGPT:** Great — let's walk through a simplified example of a daisy chain that mimics how an asset manager-owned life insurer might structure its balance sheet and cash flows.

#### **□ Goal of the Structure**

Maximize return on equity (ROE) by using stable insurance liabilities (e.g., annuities) and short-term funding to finance a levered portfolio of yieldy, illiquid assets, such as CLO tranches or private credit.

## □ **Step-by-Step Daisy Chain Example**

### 1. The Liability Base: Fixed Annuities Sold to Retail Investors

- The insurer raises \$1 billion from policyholders who buy fixed annuities.
- These annuities promise 3-4% annual yield over 10+ years.
- From the insurer's view: this is stable, long-term funding.

□ This becomes the foundation of the structure — cheap, sticky capital.

### 2. Initial Investment: CLO Equity

The insurer takes the \$1 billion and invests in:

- \$200 million into CLO equity tranches (expected IRR 12-15%)
- \$300 million into BBB/BB CLO tranches
- \$500 million in other long-duration fixed income (e.g., investment-grade corporates)

Now the insurer has illiquid, long-term assets and is exposed to credit risk and spread volatility — but this is just the first layer.

### 3. Leverage Layer: FHLB Advance or Repo Borrowing

- The insurer pledges the investment-grade tranches and corporates as collateral to borrow, say, \$400 million from the FHLB at 4.5% interest.
- These borrowed funds are reinvested into more CLOs or other structured credit.

□ Now the insurer has leveraged up the original \$1B liability base, while keeping some assets pledged and some unpledged.

### 4. Reinvestment Layer: Side Vehicle or Reinsurance

- The insurer reinsures a portion of the annuity liabilities to a Bermuda-based captive.
- The Bermuda vehicle can operate with lower capital requirements (regulatory arbitrage).

The Bermuda reinsurer may then:

- Reinvest the freed-up capital into more private credit, real estate debt, or warehouse lines for new CLOs.
- Fund these investments partially with short-term commercial paper or securitized annuity cash flows.

□ This introduces shadow leverage that doesn't show up directly on U.S. GAAP financials.

## 5. Securitization or Synthetic Wrapping

- Some assets (e.g., loan portfolios or lease receivables) might be securitized into new vehicles.
- The equity or mezzanine tranches of these new vehicles are often bought by the original insurer or its affiliates.
- In some cases, Total Return Swaps (TRS) or credit-linked notes are used to synthetically gain exposure to these assets — off-balance sheet.

□ At this point, it's hard to say whether an asset is:

- A true investment
- A collateral source
- A funding conduit
- Or a risk transfer wrapper

□ What This Chain Looks Like in Summary

### Layer

Retail Annuities CLO/Structured Credit/ FHLB / Repo/ Bermuda Reinsurance/ New securitizations/ Derivatives / TRS

### Description

\$1B from policyholders Primary asset allocation

- \$400M short-term funding
- Moves liabilities off-book
- Create more investable assets
- Optional risk transfer

## Role

- Base funding
- Return engine
- Leverage
- Capital efficiency
- Recursion
- Exposure shaping

## □ Risks Hiding in the Chain

- Liquidity mismatch: Even though annuities are long-term, short-term borrowing (FHLB, repo) can dry up.
- Asset impairment: If CLOs or private credit marks drop, funding sources can evaporate.
- Regulatory gaps: Reinsurance to offshore captives can obscure true leverage and risk.
- Contagion loops: One weak link (e.g., downgrade of pledged assets) can trigger margin calls across the system.

Would you like a diagram to visualize this chain? I can generate one for clarity.

**RIJ:** Sure.

**ChatGPT:** [See 'Data Connection' image at right and on the *RIJ* homepage, June 2, 2025.]

**RIJ:** That's gorgeous.

**ChatGPT:** I'm glad you liked it! If you want to dive deeper into any specific part of the chain — like the Bermuda reinsurance mechanics, FHLB dynamics, or how these structures show up (or don't) in statutory filings — I'm happy to break it down further.

**RIJ:** To be continued.

**ChatGPT:** Looking forward to it — talk soon!

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